



Rhode Island Department of Health

Beach Monitoring Program



Division of Environmental Health
Office of Food Protection/Beach Program
3 Capitol Hill, Room 203
Providence, Rhode Island 02908

Adapted from a presentation to the Senate Committees on
Government Oversight and the Environment
(November 12, 2003)

Beach Monitoring Program

- Overview

- Role of HEALTH
- Beach Closures
- Problem Beaches
- Recommendations

Beach Monitoring Program

- Role of HEALTH

Beach Program Mission Statement*

Reduce illness associated with swimming in contaminated bathing waters.

*Healthy People 2010

Beach Monitoring Program

- Role of HEALTH

Bathing Related Illnesses

- Shigella
- E. Coli 0157:H7
- Gastroenteritis
- Hepatitis A
- Giardia
- Cryptosporidium
- Strep A
- Ear Infections
- Swimmer's Itch

*US Centers for Disease Control/US Environmental Protection Agency

Beach Monitoring Program

•Role of HEALTH

Governor's Narragansett Bay and Watershed Planning Commission

- "By January 2004, establish one or more Strategic Assessment Teams to identify and assess...conditions that can lead to...beach closures."
- "By 2005, develop a comprehensive storm water management plan..."
- "By 2010, reopen 25% of areas now closed to swimming."
- "By 2010, reduce number and frequency of beach closures by 50%."

Beach Monitoring Program

- Role of HEALTH

HEALTH's Office of Food Protection/Beach Program

- License 122 beaches
 - Public/Private; Saltwater/Freshwater
- Risk Based Monitoring
- Closings
 - Close beaches quickly when contamination is present
 - Protect public health
 - Reopen beaches quickly when the water is safe
 - Minimize economic impact and inconvenience to the public.

Beach Monitoring Program

- Role of HEALTH

- HEALTH's Office of Food Protection/Beach Program Cont'd
 - Sanitary surveys
 - Public notification
 - Develop predictive models
 - Faster testing methods
 - Work with DEM, Towns, Beach Operators, and others to quickly identify and eliminate sources of contamination.
 - At least weekly communication with DEM

Beach Monitoring Program

- Role of HEALTH

Sanitary Surveys

- Two Part Process
 - Collection of Known Information
 - NPDES Permits, WWTFs, 303d List/305b Report, Historic Sample Results, Past Closures/Advisories, Septic System density, etc.
 - Field Survey
 - Pipes, Wild/Domesticated Animals, Stormwater Runoff Points, Sanitary Facilities, Streams/Rivers, Marinas.
 - General Information-Lat/Longs of sampling stations, pipes, runoff points, length of beach (Orthos), Seaweed Wrack, and general comments.

Beach Monitoring Program

- Role of HEALTH

- HEALTH Laboratories

- Performed 2756 tests in 2003
- RNA fingerprinting of pollution sources
 - In development

- Disease Prevention and Control/Food Protection

- Surveillance of bathing related illnesses

Beach Monitoring Program

- Beach Closures

2003 Beach Season

- 67 Closures – 454 Closure Days
 - Increase in closures from 2002 (27 Closures)
- Increase in Rainfall this year
 - 2002 - 5.67"
 - 2003 - 14.96"
- Sewage Discharges statewide (CSO's)
 - 2002 – 79 million gallons
 - 2003 – 268 million gallons
- Storm water runoff

Beach Monitoring Program

- Beach Closures



- Standards
 - Fecal Coliform
 - 50 MPN in saltwater
 - 200 MPN in freshwater
 - Enterococci
 - 35 MPN geomean
 - 104 MPN single sample max
- Methods
 - 24-hour tests

Beach Monitoring Program

- Beach Closures

Year	Closures	Closures Days	Rain Greater than 0.5"	Samples Collected
2003	67	454	11	2567**
2002	27	103	5	1779**
2001	26	148	7	976
2000	11	103	4	1515*
1999	8	20	2	975*
1998	14	190	8	392

Funding for Saltwater Beaches Provided by: **EPA BEACH Program, *EPA EMPACT Program

-In 2001, HEALTH changed from a 3-5 day test to a 24-hour test.

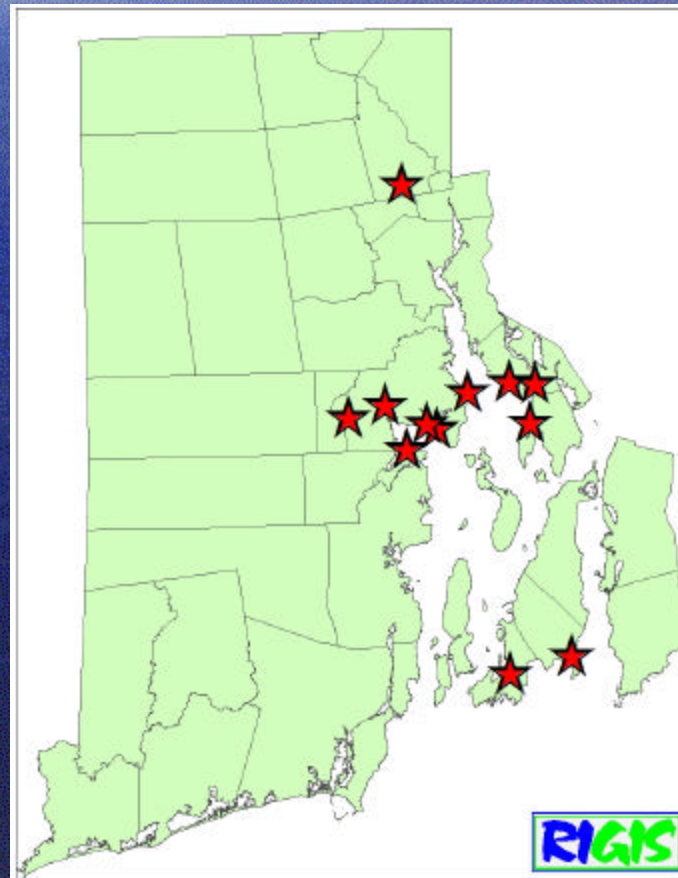
Beach Monitoring Program

- Problem Beaches

➤ 12 Beaches have accounted for 86% of closure days since 1998.

2003 Season Totals at these beaches

Warren Town Beach	78
Conimicut Point	67
Oakland Beach	66
Barrington Town Beach	28
Bristol Town Beach	26
King Park Swim Area	26
City Park	23
Gorton Pond	22
Goddard Park	21
Kent County YMCA	11
Lincoln Woods	5
Third Beach	2



Beach Monitoring Program

- Problem Beaches

Major Contributors to beach closures – 2003 Bathing Season – 454 Total Closure Days

Percentage of Closures	City/Town	Number of Closure Days	Facilities Closed
46%	Warwick	210	City Park, Conimicut Point, Goddard Park, Gorton Pond, Kent County YMCA, Oakland Beach
17%	Warren	78	Warren Town Beach
7%	Newport	32	Easton's Beach, Fort Adams, King Park Swim Area
6%	Barrington	28	Barrington Town Beach
6%	Bristol	26	Bristol Town Beach

➤ Same problem beaches every year.

Warren Town Beach

Impacts & Influences
Under Consideration

- A) Stormwater Discharge
(410,000 MPN)
- B) Stormwater Discharge
(210,000 MPN)
- C) Warren River Influence
- D) Large Number of Boats
- E) Seagulls
- F) Sewage Treatment Plant
- G) Industry
- H) Residential



NORTH

Data Source



Cominicut Point

Impacts & Influences
Under Consideration

A) CSO's (?)

B) Seagulls

A

B

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HEALTH RI

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Oakland Beach

Impacts & Influences
Under Consideration

- A) Stormwater Runoff
-Multiple Sources
- B) Large Number of Boats
- C) Seagulls



Data Source



NORTH

B

Barrington Beach

Impacts & Influences
Under Consideration

- A) Seagulls
- B) CSO's (?)
- C) Stormwater Runoff
-Multiple Sources

B

C

A



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Data Source



B

A

C

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Bristol Beach Impacts & Influences Under Consideration

A) Seagulls

B) CSO's (?)

C) Stormwater Runoff (24,000MPN)

King Park Swim Area

Impacts & Influences
Under Consideration

B

A

C

A) Combined Sewage Overflow

B) Large Number of Boats

C) Seagulls

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City Park Beach Impacts & Influences Under Consideration

- A) Stormwater Runoff
-Multiple Sources
- B) Large Number of Boats
- C) Seagulls



Data Source



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Gorton Pond

Impacts & Influences
Under Consideration

- A) Stormwater Runoff
-Multiple Sources
- B) Waterfowl

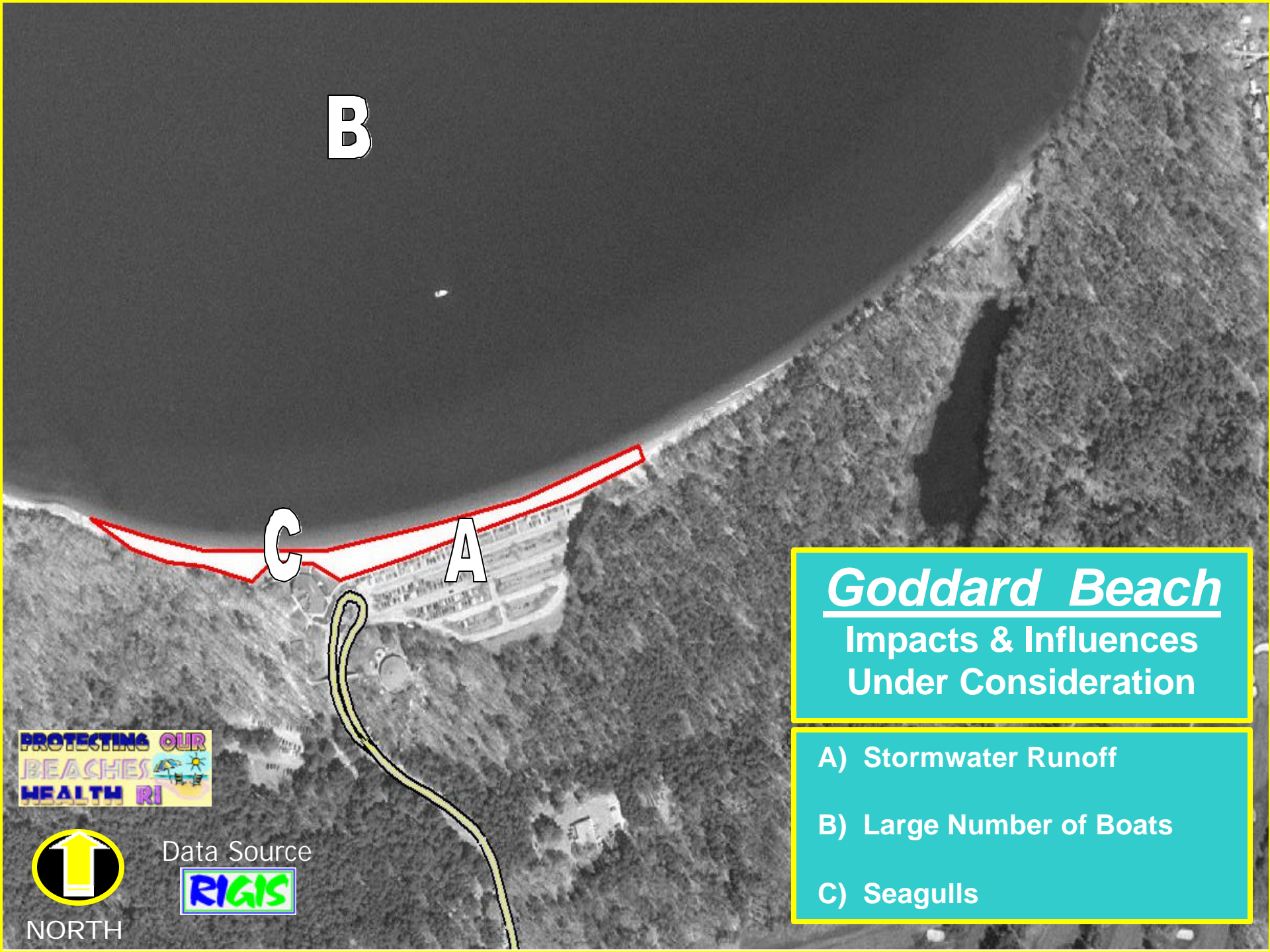
B



Data Source



NORTH



B

C

A

Goddard Beach Impacts & Influences Under Consideration

- A) Stormwater Runoff
- B) Large Number of Boats
- C) Seagulls

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Kent County YMCA

Impacts & Influences
Under Consideration

A) Waterfowl

B) Insufficient Flow/Circulation

C) Wildlife

A

B

C

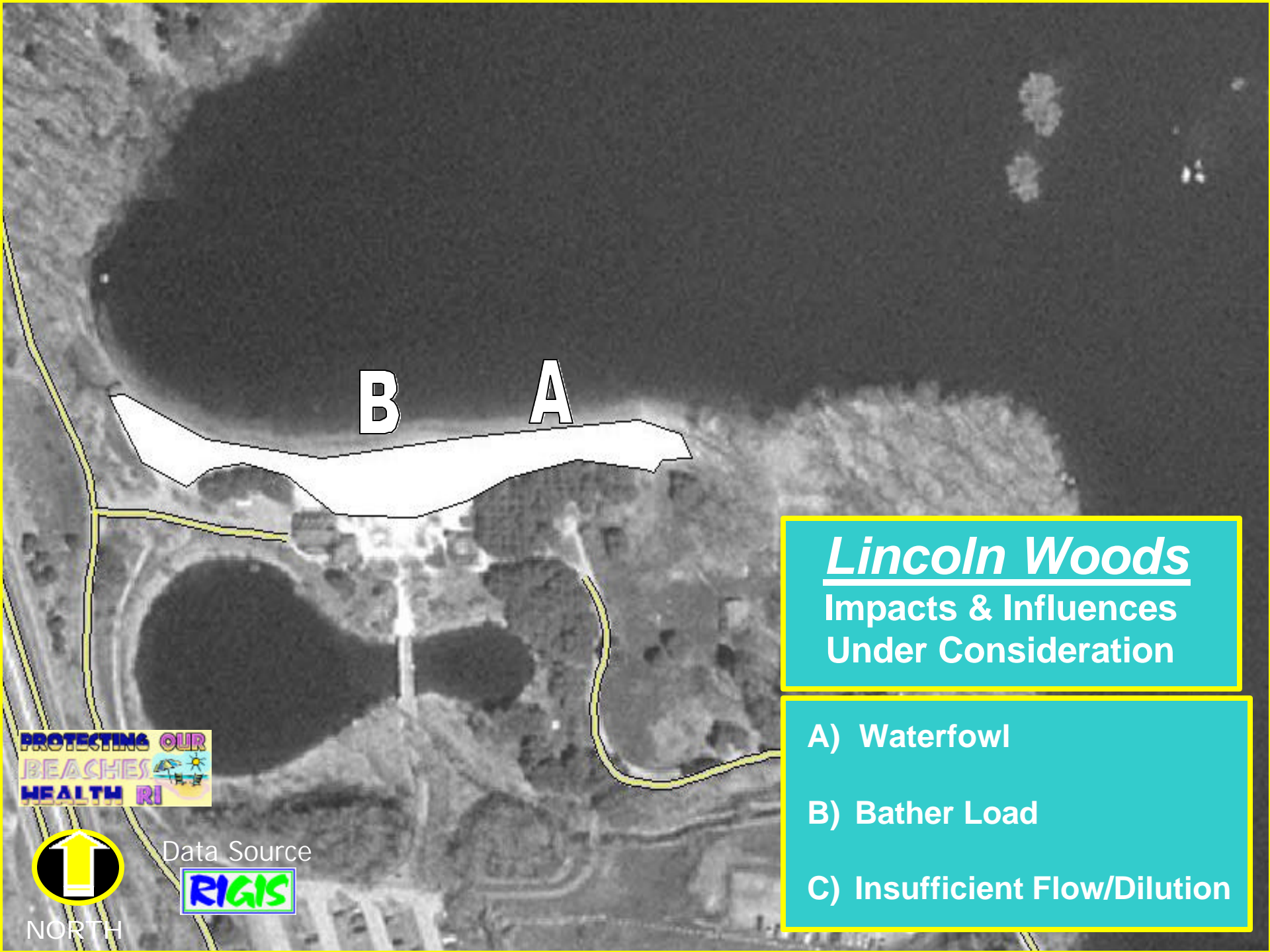
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Lincoln Woods Impacts & Influences Under Consideration

- A) Waterfowl
- B) Bather Load
- C) Insufficient Flow/Dilution

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Third Beach

Impacts & Influences Under Consideration

A) Stream (beach closed
for 300 ft. on either side)

- Stable
- Nursery

B) Seagulls

C) Wildlife



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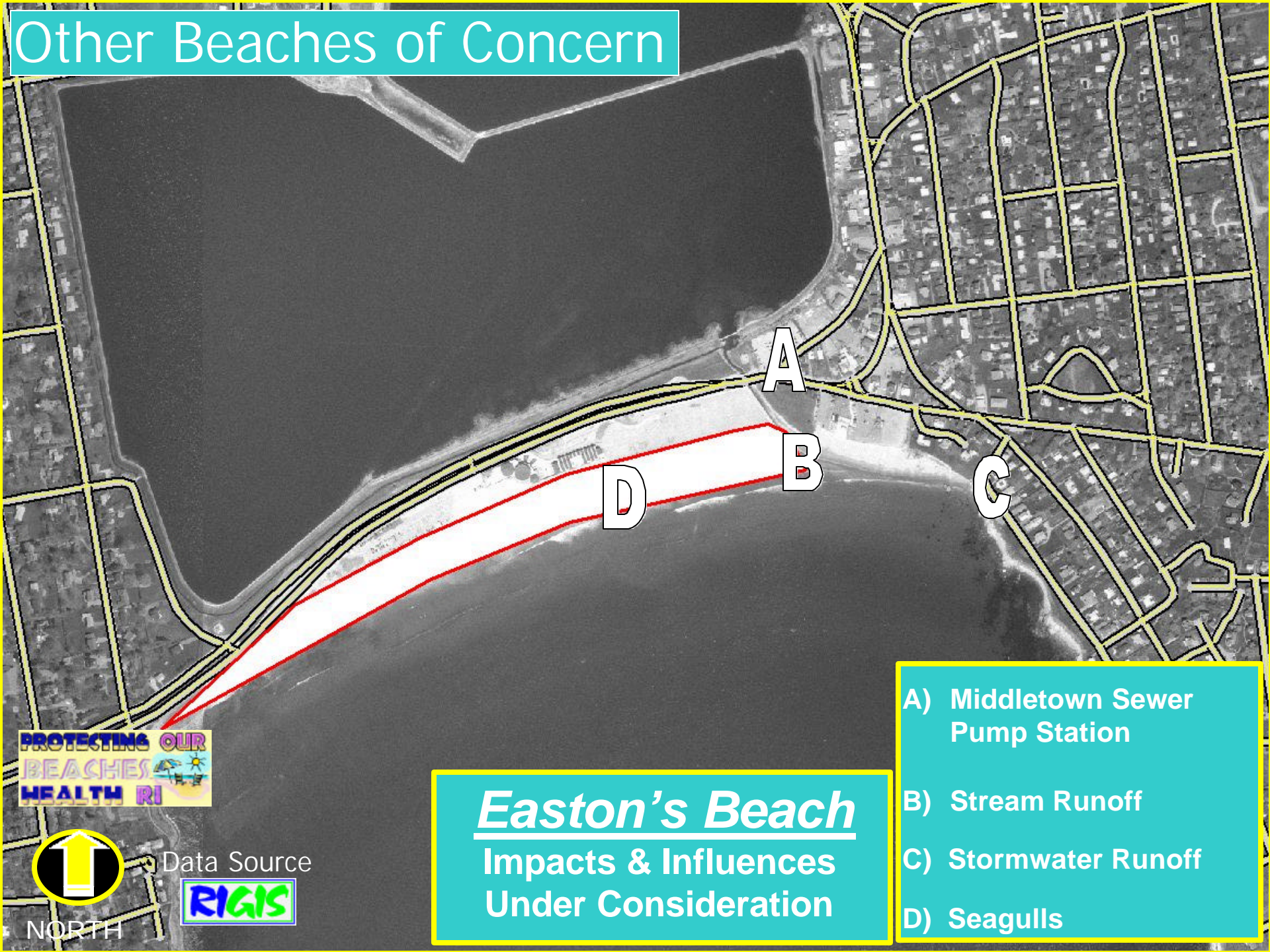
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Other Beaches of Concern



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Easton's Beach Impacts & Influences Under Consideration

- A) Middletown Sewer Pump Station
- B) Stream Runoff
- C) Stormwater Runoff
- D) Seagulls

Other Beaches of Concern

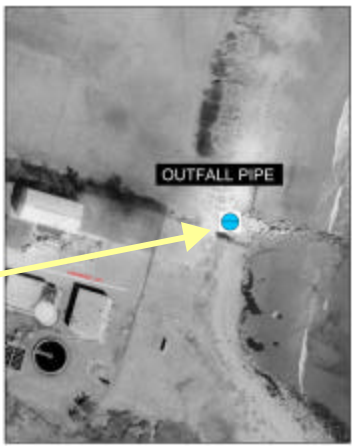
Scarborough State Beach Impacts & Influences Under Consideration



Date	Sample
06/19/03	930
07/17/03	930
07/23/03	15000
07/23/03	9300
07/24/03	43000
07/24/03	9300
07/25/03	23000
07/25/03	4300



Date	Sample
06/12/03	9300
06/17/03	150
06/19/03	930
07/24/03	4300
07/24/03	23000



Date	Sample
06/13/03	>24000
06/19/03	930
07/24/03	240
07/21/03	2400
07/24/03	15000
07/25/03	1500



Data Source



NORTH

Beach Monitoring Program

- Recommendations

- Major Sewer and CSO Projects
 - Newport
 - Providence
 - Warwick
- Improve Compliance with Boat No-Discharge Law near beaches
- Stormwater Management
- Waterfowl Management at Beaches
 - No feeding of waterfowl at beaches
 - Beaches cleaned at end of day to remove food

Beach Monitoring Program

- Recommendations

- Lincoln Woods State Park
 - Dredge sediment from beach area
 - Evaluate bather load, flow patterns, and amount of dilution
 - Control of Canada Goose population

Beach Monitoring Program

- Public Notification

Measures to Notify the Public

- Press Releases (44 in 2003)
 - Faxed to 22 Major Media Outlets in Rhode Island (Radio, TV, and Newspapers)
- Flags and Signs
- Hotline
 - (401) 222-2751
- Website
 - www.health.ri.gov/environment/beaches/index.html
 - Over 10,000 hits in 2003

Beach Monitoring Program

•Press Release

*Public
Health*

Patricia A. Nolan, MD, MPH
Director of Health
Rhode Island Department of Health

*** *News News News News News News* ***

Safe and Healthy Lives in Safe and Healthy Communities

For: Immediate Release
Date: (Type date here.)
Contact: (Type contact person and phone number here.)

HEALTH Recommends Closing (INSERT NAME OF BEACH)


Today, HEALTH recommended that the (INSERT NAME OF TOWN OR STATE) close (INSERT NAME OF BEACH) to swimming due to high bacteria counts. Officials will continue to monitor the water quality and recommend re-opening when the area is safe for swimming.

For up to date information about swimming at Rhode Island beaches, go to the HEALTH website at www.healthri.org or for recorded information about RI Bathing beaches call (401) 222-2751.



Beach Monitoring Program

- Website

**Rhode Island Department of Health
Bathing Beaches Monitoring Program**



The Rhode Island Department of Health Beach Monitoring Program is to provide real-time water quality and safety information concerning the state's bathing beaches. Through effective management of these beaches, the Department of Health can minimize public health risks associated with swimming in coastal waters.

 [Current Advisories and Closures](#) 

[Rhode Island's Licensed Bathing Facilities and Water Quality Data](#)

[Beach Sampling Information](#)

[E.M.P.A.C.T Project Summary for 1999-2000](#)

[Swimming Advisory Notice for upper Narragansett Bay](#)

[Swimmer's Itch Information](#)

[Swimming-Related Illnesses](#)

[Illnesses Complaint Form](#)

[Animals and the Beach](#)

[Other Links concerning Rhode Island's water quality](#)

Beach Monitoring Program

- Contact Information

For more information, please contact:

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